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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/943,562
Filing Date: August 30, 2001
Appellant(s): DOYLE ET AL.

Thomas E. Lees
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/13/07 appealing from the Office action mailed 5/14/07 (Final Rejection).

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Hu, US 6,173,322 B1, issued on Jan. 9, 2001, and filed on Jun. 5, 1997.

Hu et al., US 6,535,518 B1, issued in Mar. 18, 2003, and filed on Aug. 3, 2000.

Fielding et al., RFC 2068 HTTP/1.1, published on January 1997.

Dillon et al., US 6,658,463 B1, issued on Dec. 2, 2003, and filed on Feb. 4, 2000.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 45, 46, 48-49, 51-79, 82-98, 103 and 104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hu (hereinafter Hu, U.S. Patent No. 6,173,322 B1) in view of Hu et al. (U. S. Patent No. 6,535,518 B1), and further in view of Fielding et al. (hereinafter Fielding, RFC 2068 HTTP/1.1).

As per claim 45, Hu discloses a method of serving objects in a computing network, the method comprising:

receiving a request from a sender for an object stored on an intelligent storage system, i.e. content server, the request being received by a web server (fig. 4 block #404 and fig. 2 block #202, col. 4 L4 to col. 5 L8: network request manager operates as web site on a computer, i.e. web server);

evaluating the request for the object based upon at least one predetermined criterion (fig. 4 item #406, col. 6 L50-67, col. 7 L53-63);

if the at least one predetermined criterion is met, returning a response message including the web site address, i.e. url, from the web server to the sender, wherein the sender utilizes the

response message to obtain the object in manner that bypasses the web server for outbound traffic from the intelligent storage system to the client (col. 11 L4 to col. 12 L52: i.e. when the redirection criteria is satisfied, the system utilizes redirect module);

if the at least one predetermined criterion is not met, serving the stored object from the intelligent storage system to the sender via the web server (col. 11 L4 to col. 12 L52: i.e. when the redirection criteria is not satisfied, the system operates under proxy module, which obtains the response from the storage device and forwards the response to the client or sender).

However, Hu does not disclose intelligent storage system comprising a control unit configured to determine a mapping for the requested object to a location on an associated storage device (i.e. a network-attached storage system or SAN) and the process wherein the response message includes a location of the object on the associated storage device of the intelligent storage system (i.e. implemented by sending the redirect response message including redirect status code, as per appellant specification, e.g. pg. 17 L17-21, pg. 24 L15 to pg. 25 L4).

Hu et al., from the same field of endeavor, explicitly discloses an intelligent storage system comprising a control unit configured to determine a mapping for the requested object to a location on an associated storage device (i.e. a network-attached storage system, col. 2 L35-67, fig. 8 item 110, fig. 9 item #250, col. 5 L1-62, col. 6 L19-67, col. 7 L15-36, col. 8 L30 to col. 9 L24, col. 19 L63 to col. 20 L49, fig. 11, fig. 12).

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Hu in view of Hu et al., in order to include a an intelligent storage system such as network-attached storage.

One of ordinary skilled in the art would have been motivated because it would have improved the overall system performance, throughput, quality of service (QoS) and further it would have provided flexibility and scalability (Hu et al., col. 2 L60-67, col. 3 L25 to col. 4 L15, col. 5 L1-11, col. 6 L59-67).

However, Hu in view of Hu et al. does not expressly disclose the process wherein the response message, i.e. redirect status message including redirect code, includes a location of the object on the associated storage device of the intelligent storage system (note that Hu returns "whatever information" to the client so that client can establish a direct connection between the content server and itself in order to receive the response directly from the content server).

Fielding explicitly describes the http protocol and its features including the response message, i.e. a redirect message using the redirect status codes and includes a location of the object on the associated storage device ([10.3]: an inherent, obvious and a well known feature of HTTP protocol).

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Hu in view of Hu et al., and further in view of Fielding in order return a response message which includes a location of the object on the associated device of the intelligent storage device.

One of ordinary skilled in the art would have been motivated because it would have automatically redirected a client's request to an appropriate location (Fielding, [10.3.1]).

As per claim 46, Hu discloses the process wherein returning a response message from the web server to the sender comprises informing a sender of the received request that a subsequent

connection to the control unit should be established for serving the stored object (col. 6 L14-22; col. 13 L45-47; col. 12 L43-48; col. 18 L47-51).

As per claim 48, Hu discloses the process wherein the response message comprises redirect indication of an existing protocol (col. 11 L17-34 and col. 3 L8-10: http uses 302 as a redirect code).

As per claim 49, Hu discloses the process wherein the existing protocol is Hypertext Transfer Protocol (col. 5 L29-34; col. 6 L60-61).

As per claim 51, Hu discloses the process further comprising automatically requesting establishment of the subsequent connection between the sender and the storage system in response to the response message (col. 12 L35-40).

As per claim 52, Hu in view of Hu et al. discloses the process wherein evaluating the request for the object based upon the at least one predetermined criterion comprises evaluating the request for the object based upon a size of the stored object (Hu, col. 12 L10-42; Hu et al., col. 6 L19-67). One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 45.

As per claim 53, Hu discloses the process wherein evaluating the request for the object based upon the predetermined criterion comprises comparing a size of the stored object to a statically-specified number (col. 10 L1-9; col. 8 L26-38 and fig. 6 step#602).

As per claim 54, Hu discloses the process wherein the statically-specified number is specified by an administrator using a configuration interface (col. 7 L60-62).

As per claim 55, Hu discloses the process wherein evaluating the request for the object based upon at least one predetermined criterion comprises comparing a size of the stored object

to a dynamically-determined number (fig. 6 block #204 and step #602, 604; col. 7 L53-61; col. 5 L55-67 and col. 10 L1-5).

As per claim 56, Hu discloses the process wherein the dynamically-determined number is determined in view of current network conditions (col. 9 L7-65).

As per claim 57, Hu in view of Hu et al., discloses evaluating the request for the object based upon at least one predetermined criterion comprises evaluating a naming extension (such as jpeg or mpeg file) of the stored object (Hu, fig. 7 block #702 and fig. 6 step #602 and col. 8 L26-38; Hu et al., col. 1 L5-32, col. 5 L25 to col. 6 L59, col. 7 L15-16). One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 45.

As per claim 58, Hu in view of Hu et al., discloses evaluating the naming extension of the stored object comprises determining whether a naming extension matches an element in a statistically-specified set of naming extensions (Hu, fig. 7 block #702 and fig. 6 step #602 and col. 8 L26-38; Hu et al., col. 1 L5-32, col. 5 L25 to col. 6 L59, col. 7 L15-16). One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 45.

As per claim 59, Hu in view of Hu et al., discloses the process wherein the statically-specified set of naming extensions is specified by an administrator using a configuration interface (Hu, col. 7 L60-62; Hu et al., col. 1 L5-32). One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 45.

As per claim 60, Hu in view of Hu et al., discloses the process wherein evaluating the request for the object based upon predetermined criterion comprises determining whether a naming extension matches an element in a set of dynamically-determined set of naming extensions (Hu, fig. 7 block #702 and fig. 6 step #602 and col. 8 L26-38; Hu et al., col. 1 L5-32).

One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 45.

As per claim 61, Hu in view of Hu et al., discloses the process wherein the dynamically-determined set of naming extensions is determined in view of current network conditions (Hu, col. 9 L7-65; Hu et al., col. 1 L5-32). One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 45.

As per claim 62, Hu in view of Hu et al., discloses the process wherein evaluating the request for the object based upon at least one predetermined criterion comprises evaluating the request for a name of the stored object (Hu et al., col. 5 L25 to col. 6 L59, col. 7 L15-26). One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 45.

As per claim 63, Hu discloses the process wherein evaluating the request based on criteria comprises determining whether an object name matches an element in a statically-specified set of object names (fig. 7 block #702 and fig. 6 step #602 and col. 8 L26-38).

As per claim 64, Hu discloses the process wherein the statically-specified set of object names is specified by an administrator using a configuration interface (col. 7 L60-64).

As per claim 65, Hu discloses the process wherein evaluating the request based on criteria comprises determining whether an object name matches an element in a set of dynamically-determined set of object names (fig. 7 block #702 and fig. 6 step #602 and col. 8 L26-38).

As per claim 66, Hu discloses the process wherein the dynamically-determined set of object names is determined in view of current network conditions (col. 9 L7-65).

As per claim 67, Hu discloses the process wherein the predetermined criteria comprises a content type of the stored object (col. 13 L5-10).

As per claim 68, Hu discloses the process wherein evaluating the request based on criteria comprises determining whether a content type matches an element in a statically-specified set of content types (fig. 7 block #702 and fig. 6 step #602 and col. 8 L26-38).

As per claim 69, Hu discloses the process wherein the statically-specified set of content types is specified by an administrator using a configuration interface (col. 7 L53-62; col. 8 L42-59).

As per claim 70, Hu discloses the process wherein evaluating the request based on criteria comprises determining whether a content type matches an element in a set of dynamically-determined set of content types (fig. 7 block #702 and fig. 6 step #602 and col. 8 L26-38).

As per claim 71, Hu discloses the process wherein the dynamically-determined set of content types is determined in view of current network conditions (col. 9 L7-65).

As per claim 72, Hu discloses the process wherein evaluating the request for the object upon at least one predetermined criterion comprises using one or more wildcards which may operate to match more than one stored object (col. 6 L53-61).

As per claim 73, Hu does not disclose the process wherein the intelligent storage system comprises a network-attached storage.

Hu et al., from the same field of endeavor explicitly discloses the intelligent storage system, i.e. a network-attached storage OR storage area network (col. 2 L35-67, fig. 8 item 110, fig. 9 item #250).

Therefore it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Hu in view of Hu et al., in order to employ network-attached storage system or storage area network.

One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 45.

As per claim 74, Hu discloses a method of creating a link to an object, the method comprising:

receiving a request for a particular object that is stored in an intelligent storage system, i.e. content server (col. 5 L29-34; col. 18 L29);

evaluating at least one characteristic of the particular object (col. 6 L62-67 and col. 8 L8-10; col. 12 L10-53; col. 18 L30-31);

retrieving a redirect link that instructs web server receiving the request to return a response message if the at least one evaluated characteristics of the particular object is satisfied (col. 5 L41-47 and col. 12 L11-52), the response message including web site address such as URL and being configured to redirect the request to the storage system (fig. 2 item #212, col. 11 L 16-35, col. 12 L35-36); and

locating an object serving link that is utilized by the web server receiving the request to obtain the object from the intelligent storage system and return object in response to the request if the evaluated characteristics of the particular object is not satisfied (col. 5 L20-54 and fig. 13: more than one request manager implies that there is more than one redirect file employed, col. 6 L43-61: parsing the request to obtain the requested information such as URL, and col. 11 L45-59).

However, Hu does disclose an intelligent storage system comprising a control unit configured to determine mapping for the requested object to a location on an associated storage device (i.e. intelligent storage is not a network-attached storage or storage area network) and the process wherein the response message includes the location of the requested object on the associated storage device of the intelligent storage system (i.e. a redirect response message including redirect status code).

Hu et al., from the same field of endeavor, explicitly discloses an intelligent storage system comprising a control unit configured to determine a mapping for the requested object to a location on an associated storage device (i.e. a network-attached storage system or SAN, col. 2 L35-67, fig. 8 item 110, fig. 9 item #250, col. 5 L1-62, col. 6 L19-67, col. 7 L15-36, col. 8 L30 to col. 9 L24, col. 19 L63 to col. 20 L49, fig. 11, fig. 12).

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Hu in view of Hu et al., in order to include a an intelligent storage system such as network-attached storage or SAN.

One of ordinary skilled in the art would have been motivated because it would have improved the overall system performance, throughput and quality of service (QoS) and further it would have provided flexibility and scalability (Hu et al., col. 3 L25 to col. 4 L15, col. 5 L1-11, col. 6 L59-67).

However, Hu in view of Hu et al. does not expressly disclose the process wherein the response message includes a location of the object on the associated storage device of the intelligent storage system (i.e. redirect status message including redirect status code, note that Hu returns “whatever information” to the client so that client can establish a direct connection

between the content server and itself in order to receive the response directly from the content server).

Fielding explicitly discloses the http protocol and its features including the response message, i.e. a redirect message using the redirect status codes and includes a location of the object on the associated storage device ([10.3]: an inherent, obvious and a well known feature of HTTP protocol).

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Hu in view of Hu et al., and further in view of Fielding in order return a response message which includes a location of the object on the associated device of the intelligent storage device.

One of ordinary skilled in the art would have been motivated because it would have automatically redirected a client's request to an appropriate location (Fielding, [10.3.1]).

As per claim 75, Hu discloses the process wherein the redirect file enables returning a redirect status code to a requester of the object (col. 12 L43-52).

As per claim 76, Hu discloses the process of requesting establishment of a subsequent connection automatically in response to receiving the redirect status code for retrieving the particular object directly from the intelligent storage system (col. 12 L35-40 and col. 18 L47-51).

As per claim 77, Hu discloses the process wherein contents of the redirect file are programmatically created (col. 5 L20-22 and L40-47).

As per claim 78, Hu in view of Hu et al. does not explicitly disclose the process wherein the contents of the redirect file are manually created, However, the process of manually creating the redirect link is known in the art Therefore it would have been obvious to a person of ordinary

skilled in the art at the time the invention was made to modify Hu in view of Hu et al. in order to create the contents of the redirect link manually. One of ordinary skilled in the art would have motivated because it would have enabled a web site developer or an administrator to redirect traffic to an appropriate destination.

As per claim 103, Hu, Hu et al. and Fielding discloses the process wherein the receiving a request from a sender for an object on an intelligent storage system, the request being received by a web server, and the intelligent storage system comprising a control unit configured to determine the mapping for the requested object to a location on an associated storage device further comprises providing a web server within the intelligent storage system capable of processing HTTP redirect messages (Hu: fig. 2, col. 5 L20-67; Hu et al.: col. 2 L35-67, fig. 8 item 110, fig. 9 item #250, col. 5 L1-62, col. 6 L19-67, col. 7 L15-36, col. 8 L30 to col. 9 L24, col. 19 L63 to col. 20 L49, fig. 11, fig. 12).

As per claim 104, Hu, Hu et al and Fielding discloses the process wherein the returning of a redirect code from the web server to the sender further comprises obtaining a redirect file stored on the web server that identifies the location of the object on the intelligent storage system (Hu: col. 5 L41-47 and col. 12 L43-52, fig. 2 item #212, col. 12 L35-36; Fielding: [10.3]).

As per claims 79, 82-98, they do not teach or further define over the limitations in claims 45, 46, 48-49, 51-78, 103 and 104. Therefore, claims 79, 82-98 are rejected for the same reasons as set forth in claims 45, 46, 48-49, 51-78, 103 and 104.

Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hu (hereinafter Hu, U.S. Patent No. 6,173,322 B1) in view of Hu et al. (U. S. Patent No. 6,535,518 B1), further in view of Fielding et al. (hereinafter Fielding, RFC 2068 HTTP/1.1), and further in view of Dillon et al (hereinafter Dillon, U.S. Patent No. 6,658,463 B1).

As per claim 50, Hu, Hu et al. and Fielding does not explicitly disclose the process of using the wireless session protocol.

Dillon explicitly discloses a satellite communications network including an upstream proxy server and two reporting downstream proxy servers wherein communication takes place through a wireless satellite link using wireless session protocol (fig. 7 and col. 12 L52-58).

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to incorporate the teaching of Dillon with Hu, Hu et al. and Fielding in order to order to enable communications wirelessly by using wireless session protocol.

One of ordinary skilled in the art would have been motivated because it would have improved the transmission efficiency by providing high-speed and continuous channel carrying packetized data (Dillon et al, col. 1 L15-21; col. 3 L38-57).

(10) Response to Argument

Examiner summarizes various arguments raised by the appellant and addresses each of them individually.

In the Brief, appellant argues in substance that:

Arguments pertaining to claims 45, 82 and 87 (Brief, 1.B):

a. It is the appellant's position that Hu '322, Hu '518 and Fielding, even when combined, fail to teach or suggest returning a response message from a web server to a sender if at least one predetermined criterion is met, wherein the response message includes a location of an object on an associated storage device of an intelligent storage system, where the sender utilizes the response message to obtain the object from the intelligent storage system, as claimed (Brief, pg. 12: 1st and 3rd paragraph, pg. 13: 1st-5th paragraph, pg. 18: 4th paragraph).

In response to argument [a], Examiner respectfully disagrees.

Independent claim 45 recites:

> A method of serving objects in a computing network, the method comprising:
> receiving a request from a sender for an object stored on an intelligent storage system, the request being received by a web server, and the intelligent storage system comprising a control unit configured to determine a mapping for the requested object to a location on an associated storage device;
> evaluating the request for the object based upon at least one predetermined criterion;
> returning a response message from the web server to the sender if the at least one predetermined criterion is met, wherein the response message includes a location of the object on the associated storage device of the intelligent storage system, and the sender utilizes the response message to obtain the object in a manner that bypasses the web server for outbound traffic from the intelligent storage system to the client; and
> serving the stored object from the intelligent storage system to the sender via the web server if the at least one predetermined criterion is not met.

Initially, In the Brief filed, Appellant has clearly admitted that, "In redirect mode, the network request manager **returns a web site address of the selected content server** 106 or

other suitable information to the client. **Using this information**, the client 104 re-transmits the client request to the identified web site address and receives the results **directly** from the selected content server. Again in response to the client request, the network request manager selects an appropriate content server 106 using various dynamic and/or static metrics to select the content server most capable of servicing the client request…" (Brief, pg. 10).

Appellant's Disclosure:

The present invention capitalizes on standard elements of HTTP and web servers which support HTTP messages, using these elements in a novel way to improve serving of large files. In particular, existing "redirect" features of HTTP are used dynamically create a network path between a requesting client and a NAS system on which a requested file is stored, thereby eliminating the web server in the web server farm...standard http redirect support enables the present invention to selectively serve files directly to the client from the NAS…(specification, pg. 14 lines 11-19.

To enable incoming requests…the redirect support in http allows this to happen. When a request for original URL arrives, an http response message containing a special redirect status code, **along with new URL**, is returned to the requestor instead of the requested content...when the browser receives the http response message, it detects the redirect status code and automatically sends another request, this time using new URL from the http response message…(specification, pg. 15 lines 1-16).

In preferred embodiments, the criteria for serving a file directly from NAS (that is, using redirection), instead of through a web server in the web server farm, may include (by way of example): the file size exceeds some threshold; the file has a particular extension; the file has a particular name or the file is of a particular content type. These types of criteria may be used single or in combination, and more than one of each type of criteria may be used in making the redirection determination as well…(specification, pg. 20 lines 12-21).

Hu (US 6,173,322 B1, hereinafter '322).

As acknowledged by the appellant, Hu discloses a Network request manager acting as an intermediary between a client and one or more content servers 106.

As per Hu:

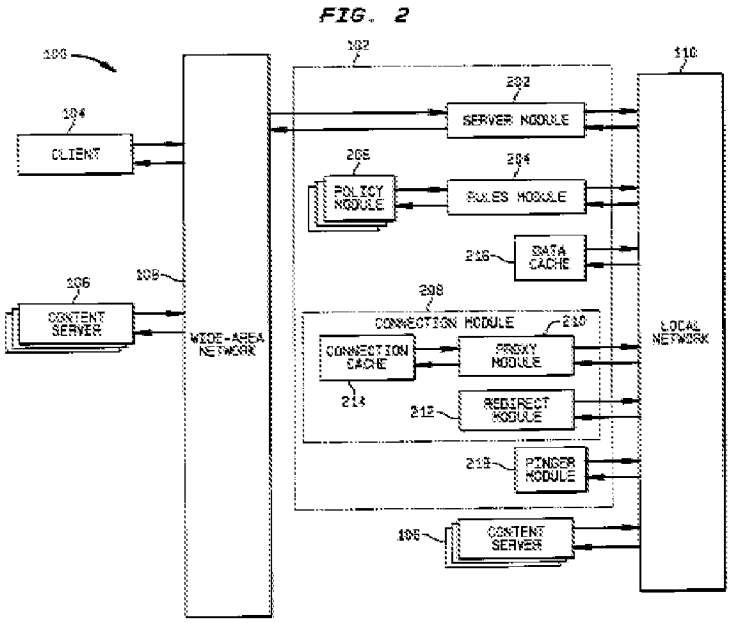
Network request manager, most commonly, would operate as a web site on a TCP/IP network. Content servers 106 accessible via the web site might be located anywhere network

request manger 102 is connected via a communication pathway. For instance, the computer which operates as the network request manager may also act as a content server 106.

A web site is defined as a collection of Web pages, images, videos or other digital assets that is hosted on one or several WEB SERVERS, usually accessible via the Internet, cell phone or LAN [**See Attachment A**].

In other words, the web site operating as a network request manager on a computer is a web server and/or content server.

Network Request manager includes a server module, a rules module, a policy module, a connection module, a proxy module, a redirect module, a data cache, etc., as shown in the reproduced figure:



Server module receives a client requests from the client via wide area network. Server module **provides a conventional interface, such as Hypertext Transfer Protocol (HTTP)** (col. 5 L20-40).

Connection module causes a particular connection to be established with the particular content server 106 (i.e. one or more server associated with 106)...**In preferred embodiment, connection module employs either proxy module or redirect module to cause the connection t**o be established, **depending upon whether certain redirection criteria have been satisfied**. **(Emphasis added)** (col. 5 L40-47).

In other words, the request manager acting in proxy mode and/or redirect mode is strictly based on the criteria and/or criterions as set forth above.

When in proxy mode, Hu's '322 network request manager operates as follows:

Col. 11 L17-59:

FIG. **9A** is a diagram **900** illustrating network request manager **102** in a proxy mode of operation. Network request manager **102** receives a client request from client **104**. In proxy mode, network request manager **102** selects an appropriate content server **106** and forwards the client request on to the selected content server **106**. Content server **106** services the client request and returns the results to network request manager **102**. Network request manager then passes the results on to client **104**. Thus, network request manager **102** acts as a proxy for client **104** when servicing the client request with content server **106**. It appears to client **104** that network request manager **102** has serviced the client request: the proxy operation is invisible to client **104**.

FIG. **9B** is a diagram **902** illustrating network request manager **102** in a redirect mode of operation. In redirect mode, network request manager **102** receives the client request and selects an appropriate content server **106** as before. Here, however, network request manager **102** responds to the client request with information that will allow client **104** to contact content server **106** directly. For example, network request manager **102** might respond with the web site address of content server **106**. Using this information, client **104** re-transmits the client request to content server **106** and receives the results directly.

Connection module **208** (not shown in FIG. **9B**, see FIG. **2**) selects a mode of operation based on certain criteria, hereinafter referred to as redirection criteria. In a preferred embodiment, the proxy mode is the default mode of operation. The connection module **208** uses the redirect mode only when the redirection criteria are satisfied. Example redirection criteria are discussed below.

Proxy Module

FIG. **10** is a dataflow diagram **1000** illustrating the operation of the present invention in a proxy mode of operation. As discussed above, rules module **204** selects a group and policy module **206** selects a specific content server **106** from within that group. For purposes of illustration, FIG. **10** shows rules module **204** as having chosen first group **502**, as described with respect to FIG. **5**. Again, first group **502** includes content servers A, B, C, E, and F, all of which being able to access common data set **1006**.

Continuing with the example, policy module **206** accesses the current dynamic metric and selects content server F to service the client request. Assuming that the redirection criteria have not been satisfied (see below), control passes to proxy module **210** within connection module **208**. Proxy module forwards the client request to content server F for servicing. Content server F accesses common data set **1006** as necessary to service the client request, and returns to proxy module **210** an indication that the client request has been completed and any results that may have been generated. Proxy module **210** then responds to client **104** with the information received from content server F (i.e., an indication that the client request was fulfilled along with any results).

Note that the connection module uses the redirect mode only when the redirection criteria are satisfied.

And, when in redirect mode, Hu's '322 network request manager operates as follows:

Col. 12 L10-52:

Redirect Module

FIG. **11** is a dataflow diagram **1100** illustrating the operation of the present invention in a redirect mode of operation. For purposes of illustration, FIG. **11** depicts rules module **204** as having selected third group **506** including content servers D, E, F, and G, each of which are able to access common data set **1102**. The policy module **206** associated with third group **506** accesses the current dynamic metric for this group and selects content server G to service this client request. Control then passes to connection module **208**.

Connection module **208** tests to determine whether the redirection criteria are satisfied. In a preferred embodiment, the redirection criteria are satisfied when connection module **208** determines that a direct connection between content server **106** and client **104** would result in significantly more efficient communication.

For example, client **104** and content server **106** may both be physically located within a few miles of each other on the East coast while network request manager **102** might be located on the West coast. It makes little sense in terms of transmission time efficiency for network request manager **102** to act as a proxy when a direct connection is possible. Similarly, content server **106** and client **104** might be connected via a high-speed network link while both might share a low-speed link with network request manager **102**. A direct connection makes more sense here as well.

Another example of a preferred redirection criteria is redirecting all of certain types of client requests. For instance, all client requests for a network intensive interactive application might be redirected automatically where acting in a proxy mode would be too burdensome in terms of network bandwidth. Those skilled in the art will recognize the multitude of different redirection criteria which might be used.

Assuming that the redirection criteria have been satisfied, control passes to redirect module **212** within connection module **208**. As described above, redirect module **212** responds to client **104** with whatever information is necessary according to the particular wide-area network **108** protocol for client **104** to contact content server G directly. In most cases the network address of the content server **106** is all that is required. Client **104** then contacts content server G directly with the client request and receives directly whatever response is provided.

In other words, when the redirection criteria are satisfied, the redirect module, responds to the client with web site address, i.e. URL and/or whatever information is necessary for client to contact content server G directly.

URL, in itself, is a location of an object on an associated storage device (See appellant specification reproduced above, or specification pg. 15 lines 1-6: redirect message comprises URL).

[Note: Examiner have not relied upon the inherent features of Hu, such as redirect status codes, and introduced Fielding et al. in order to prove the inherency].

As such, Hu explicitly discloses returning a response message from a network request manager acting as a web site on a computer and/or on a content server, see col. 4 L66 to col. 5 L8 [i.e. from a web server] to a sender, i.e. a client, if at least one redirection criteria (e.g. redirecting certain type of client requests, col. 12 L35-43) is satisfied, i.e. if at least one predetermined criterion is met, wherein the response message includes a web site address of the object, i.e. URL or location of an object on an associated storage device of a content server, e.g. col. 6 L53-61 or col. 11 L17-59, where the sender/client utilizes the response message to obtain the object from the content server G directly, i.e. bypassing the web site and/or content server on which the network request manager is operating.

Furthermore, as set forth in the rejection, Hu '322 does not disclose an intelligent storage system, which as per appellant's specification, is network-attached storage systems (NAS) or equivalents thereof, Specification, pg. 14 lines 1-10.

Hu '518 explicitly discloses an intelligent storage system that is capable of receiving and responding to the http requests, e.g. fig. 8 item #110, col. 5 L12-67.

Response to appellant's analysis of fig. 10 and fig. 11 of Hu '322:

Initially, it should be noted that appellant's analysis is solely based on fig. 10 and fig. 11 only (Brief, pg. 9-10).

On page 12 of the Brief, appellant argues that, "that is, the redirection…the content server is still responsible for processing the original client request…however, there is no teachings or suggestion in Hu '322 that the client can in any manner, directly access the common data storage 1006, 1102.

It appears that appellant is completely misinterpreting the teachings of the prior art. The common data set 1006, 1102 is common database associated with the content server, e.g. col. 7 L15-22.

For example: appellant's fig. 2 shows the data storage 240, and appellant's fig. 3 shows the web server 330. In order to service the client's request, the web server must access the data storage 240.

In response to appellant's argument that "content server is still responsible for processing the original client request", it should be noted that in the claimed invention, i.e. claim 45, the intelligent storage system is responsible for serving the client's request whether the criterions are satisfied or not.

On page 13 of the Brief, appellant further argues that "…neither the content servers nor the network request manager return the location of an object stored within the common storage 1006 and 1102 to the requesting client".

Appellant has clearly admitted throughout the Brief, e.g. pg. 12 Last paragraph, that, Hu '322 provides the client with the URL of a content server selected by the network request manager.

In HTTP, URLs are location identifiers of the object. In other words, it identifies where the object is located in the network, e.g. Hu '322 col. 6 L60-61. And the fact that Hu '322 redirection module returns the URL of a content server for an object logically implies logically that the common database is associated with content server.

Moreover, both Hu '322 and presently claimed invention utilizes redirection techniques of known http protocol.

b. Moreover, is the appellant's position that Hu '322, Hu '518 and Fielding, even when combined, fail to teach or suggest and serving the stored object from the intelligent storage system to the sender via the web server of the at least one predetermined criterion is not met, as claimed (Brief, pg. 12: 2nd paragraph).

In response to argument [b], Examiner respectfully disagrees.

As set forth above, the network request manager which normally operates as a web site, i.e. on a web server, employs either proxy mode and/or redirect mode, depending upon **whether certain redirection criteria have been satisfied**. **(Emphasis added)** (col. 5 L40-47).

In other words, if the redirection criteria are not satisfied and/or met, the network request manager employs proxy mode, and when in proxy mode, the object is served from the content server to the sender via the network request manager, which operates as a web site, i.e. web

server, if the redirection criteria are not satisfied (See the reproduced disclosure of proxy mode above).

Moreover, in the brief, appellant has clearly admitted that "Hu's system when operating in proxy mode, the network request manager receives request from client, selects the content server, forwards the request to the content server which services the request and returns the results to the network request manager, which passes the results back to the client (Brief, pg. 9)."

Hu '518 explicitly discloses an intelligent storage system such as SAN that is capable of receiving and responding to the http requests, e.g. fig. 8 item #110, col. 5 L12-67.

c. Hu '322 is completely silent with regard to, and fails to teach or suggest any form of intelligent storage system as claimed (Brief, pg. 12: 3rd paragraph).

In response to argument [c], and based on the rejection, Examiner cites Hu '518 to disclose such an intelligent storage system.

Hu '518 explicitly discloses an intelligent storage system that is capable of receiving and responding to the http requests, e.g. fig. 8 item #110, col. 5 L12-67.

Moreover, in the brief filed, appellant has clearly admitted that Hu '518 describes the use of intelligent storage, See Brief, pg. 13 2nd paragraphs.

It appears that appellant is attempting to show nonobviousness by attacking references individually. MPEP 2145 (IV) clearly sets forth that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.

In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., Inc., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

d. Appellant believes that Hu '518 teaches away from that claimed. The claimed invention recites "returning a response message…wherein response message includes a location of an object on an associated storage device...The sender then accesses object directly. However, the essence of the invention of Hu '518 is a switch that snoops packets and routes data related requests so that the server never has to see or process requests that can be handled by the intelligent storage directly. Moreover, the switch deliberately avoids sending any form of redirection back to the client, in favor or automatically forwarding storage-oriented data directly to an intelligent storage system based on forwarding rules (Brief, pg. 14: 3rd paragraph, pg. 16: 3rd paragraph).

In response to argument [d], Examiner respectfully disagrees.

Initially, it should be noted that Appellant's allegation that Hu '518 teaches away are unsupported and/or lacks factual evidence.

There is no disclosure, teachings and/or suggestions in Hu '518 that would enable one of ordinary skilled in the art to conclude that Hu '518 avoids sending any form of redirection back to the client.

Stated another way, Hu '518 does not criticize, discredit, or other wise discourage the usage of redirection. In fact, Hu '518 is fully aware of redirection, e.g. col. 11 L31-47 and it would be clear to one skilled in the art that the redirection and forwarding falls within an alternative solution and does not usurp the intent of Hu '518 because both Hu '518 and the

presently claimed invention is fully and/or strictly based on HTTP protocol, wherein redirection and/or forwarding are known [MPEP 2141.02 (VI)].

See In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004) [However, "the prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed…."].

e. Moreover, in order for an Examiner to support a rejection based upon obviousness…However, the appellant asserts that the Examiner's stated motivations to combine the cited references rely on mere conclusory statements that are not supported (Brief, pg. 14-15: 4th paragraph).

In response to argument [e], Examiner respectfully disagrees.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, the motivation is:

One of ordinary skilled in the art would have been motivated because it would have improved the overall system performance, throughput, quality of service and further provided

flexibility and scalability (Hu et al., col. 2 L60-67, col. 3 L25 to col. 4 L15, col. 5 L1-11, col. 6 L59-67).

The motivation is clearly supported, e.g. In Hu '518 as follows:

Col. 2 L60-67:

SAN is an architecture for storage systems with the advantages of flexibility and scalability. While NAS is limited due to its network interface, SAN defines an environment dedicated to storage without worrying about security or other heterogeneous design concerns. Servers (which are more versatile) are still needed to connect the SAN to an outside network. Therefore, the server bottleneck is still present. Furthermore, access control and other server fine-

Col. 3 L25-42:

BRIEF SUMMARY OF THE INVENTION

Objects of the invention include the following:

1. To increase the network and storage access performance and throughput.
2. To reduce traffic delay and loss between network(s) and storage due to server congestion or to bound the latency for real-time streamings (QoS improvement).
3. To increase server and network system, availability, reliability and reduce server system failures by reducing the traffic going through the server bus, OS and CPU.
4. To maintain the flexibility of a server-based system (vs. a network attached storage or NAS).
5. To be scalable and reduce the total system-cost.

In sum, the invention aims to provide highest levels of server-based Reliability, Availability and Scalability (RAS) for a network system and highest levels of QoS for the end users.

In summary, intelligent storage systems such as SAN provides flexibility and scalability.

f. Still further…That is, there is no teaching or suggestion that the content servers themselves can or would return a response message to the client if at least one predetermined criterion is met...(Brief, pg. 15: 2nd-3rd paragraph).

In response to argument [f], Examiner respectfully disagrees for the same reasons as set forth in response to argument [a-b].

Stated another way, the request manager acting as an intermediary, e.g. col. 4 L1-12, Brief, pg. 8 last paragraph, and operating as a web site and/or acting as a content server, e.g. col. 4 L66 to col. 5 L8, does return a response message to the client, col. 11 L10-52.

g. The proposed modifications cannot render the prior art unsatisfactory for its intended purpose. If the Examiner tries to assert that the intelligent storage could somehow replace the content servers, then the invention in Hu '322 would be rendered inoperable for its intended use. This can be seen because the content servers serve not only content but applications and perform other operations required to service client requests as described more fully herein. That is, non-content client requests could not be serviced if the content servers were replaced with intelligent storage devices (Brief, pg. 16: 1st paragraph).

In response to argument [g], Examiner respectfully disagrees.

Initially, it should be noted that the allegations as set forth above are unsupported and/or lacks factual evidence.

Appellant's basis, i.e. "because the content servers serve not only content but applications...that is non-content based client requests could not be serviced if the content servers were replaced with intelligent storage devices", in itself, is unsupported.

Intelligent storage devices of Hu '518, more specifically, SAN environment is fully capable of storing and/or handling any content and/or applications, simply because the storage area network is capable of storing any type data, information, content, software, applications, etc., e.g. Hu '518: col. 6 L42-58: storage oriented traffic handling streaming content from streaming applications, Col. 10 L59-65: storage oriented traffic to be bypassed includes ftp, rtp, etc.

As such, mere replacing one form of storage environment to another which is efficient, flexible and scalable, in itself, does not render the prior art being modified unsatisfactory for its intended purpose.

Furthermore, the Supreme Court in KSR International Co. v. Teleflex Inc., 550 U.S. ___,___, 82 USPQ2d 1385, 1395-97 (2007) identified a number of rationales to support a conclusion of obviousness which are consistent with the proper "functional approach" to the determination of obviousness as laid down in Graham. The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. See MPEP 2143.

EXEMPLARY RATIONALES

Exemplary rationales that may support a conclusion of obviousness include:

(A) Combining prior art elements according to known methods to yield

predictable results;

(B) Simple substitution of one known element for another to obtain predictable results;

(C) Use of known technique to improve similar devices (methods, or products) in the same way;

(D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;

(E) "Obvious to try" – choosing from a finite number of identified, predictable

In this case, the rationale is simply substitution of one known element for another to obtain predictable results. That is, substitution of content server with intelligent storage systems such as storage area network (SAN), which provides flexibility and scalability.

h. In this regard, it appears to the appellant that the Examiner is not evaluating the claim as a whole, but is rather attempting to piece claimed elements identified in the prior art in a impermissible hindsight manner (Brief, pg. 16: Last paragraph).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

For a rationale supporting the rejection, please see the response to argument [g] above.

Arguments pertaining to claims 74, 86 and 96 (Brief, 1.C.):

i. Hu '322 is completely silent with regard to, and fails to teach or suggest receiving a request for a particular object that is stored in an intelligent storage system, as claimed. Rather, as noted ...Hu '322 discloses the use of a network request manager that receives the client requests and assigns a corresponding content server to service the request (Brief, pg. 18).

In response to argument [i], Examiner respectfully disagrees.

Independent claim 74 recites:

> A method of creating a link to an object, the method comprising:
> receiving a request for a particular object that is stored in an intelligent storage system comprising a control unit configured to determine a mapping for the requested object to a location on an associated storage device;
> evaluating at least one characteristic of the particular object;
> retrieving a redirect file that instructs a web server receiving the request to return a response message including the location of the requested object on the associated storage device of the intelligent storage system if the at least one evaluated characteristic of the particular object is satisfied, the response message being configured to redirect the request to the control unit of the intelligent storage system; and
> locating an object serving link that is utilized by the web server receiving the request to obtain the object from the intelligent storage system and return the object in response to the request if the evaluated at least one characteristic of the particular object is not satisfied.

Initially, appellant has clearly admitted in the brief, e.g. pg. 9, that "the network request manager receives a client request from client. In response to the client request, the network request manager selects an appropriate content server..."

In other words, the network request manager receives the client's request for a particular object that is stored on a content server. See also, fig. 4 item #404, col. 4 L4-12.

At column 4 L4-12 and col. 6 L42-67, Hu '322 discloses receiving a client's request that is directed to a web site on wide area network 108, i.e. receiving the request for a particular

object on a content server on wide area network, wherein the request includes the description of action (e.g. get file), an address of data, a tag recognized as identifying particular data.

Furthermore, the rejection does ackonwledge that Hu '322 does not disclose intelligent storage system such as SAN, and depends on Hu '518 to cure this deficiency.

j. Moreover, Hu '322 is completely silent with regard to, and fails to teach or suggest evaluating at least one characteristics of the particular object, retrieving a redirect file that instructs a web server receiving the request to return a response message including location of the requested object on the associated storage device...(Brief, pg. 18, pg. 19: 2nd-3rd paragraph, pg. 20, pg. 22: 2nd paragraph).

In response to argument [j], Examiner respectfully disagrees.

In support, appellant specification discloses:

Specification, pg. 20 lines 12-21:

In preferred embodiment…the criteria…may include the file size, the file extension, the file name, the file type…"

Specification, pg. 17 lines 17-21 discloses:

"…A file containing syntax such as example 710, which is referred to herein as a redirect file or redirect page is deployed at a web server...A redirect file is a file that instructs the web server (programmatically) to return a redirect status code, along with an indication of a file's location on NAS..."

Specification, pg. 24 line 15-pg. 25 line 4:

Fig. 11 illustrates processing at a Web server in the server farm (on the left) and at a NAS (on the right), including the flow of messages and data between these components. At Block 1100, the Web server receives a content request in an HTTP request message from a client (responsive to Block 1000 of Fig. 10, for example). The Web server then checks to see if this request is for a file meeting the redirection criteria (Block 1105). If so, then the locally-stored redirect file is retrieved (Block 1110) and sent to the client (Block 1115) using a redirect status code on the HTTP response message. (See 720 of Fig. 7 for an example.) The processing of this client request by the Web server is then complete, and a subsequent

connection will be automatically requested by the client directly to the NAS, thereby bypassing the Web server in the server farm for delivery of the file.

Hu '322, at column 6 lines 50-67, teaches parsing the client request for analyzing various type of information.

Hu '322, at column 12 lines 10-52, teaches evaluating the redirection criteria related to the content. Hu '322 also discloses "another example of a preferred redirection criteria is redirecting all of certain types of client requests. For instance, all client requests for a network intensive interactive application might be redirected automatically where acting in proxy mode would be too burdensome in terms of network bandwidth. Those skilled in the art will recognize the multitude of different redirection criteria which might be used".

Based on the appellant's specification above, the characteristics are equivalent to redirection criteria, and it may include file size, file name, file type, file extension, etc.

In Hu '322, in order to determine whether the redirection criteria is satisfied or not, the network request manager receives and parses the client request, and evaluates and/or determines the type of traffic of the requested content. If the content requested falls into the redirection criteria, i.e. if the type of traffic of the requested object is same as type of type set forth in redirection criteria, the redirection module automatically redirects the client.

For example:

Considering the instance where all client requests for a network intensive interactive application that are redirected automatically where acting in proxy mode would be too burdensome in terms of network bandwidth.

In order to redirect such http traffic, the network request manager must analyze/evaluate/determine the characteristics of the requested object, i.e. in this case, it must analyze the type of traffic of the requested application/object, which is implemented by parsing the client's request and obtaining the information regarding the request and evaluate the criteria, which in this case is file "type".

As such, Hu '322 does teach analyzing at least one characteristics of the particular object, in this case, analyzing the type of requested object. Without this analysis, the redirection would not be possible.

Claim Interpretation

(i) In light of specification, e.g. pg. 24 line 15-pg. 25 line 4, which is reproduced above, "retrieving a redirect file that instructs a web server receiving the request to return a response message including location of the requested object on the associated storage device" is achieved/equivalent to "retrieving redirect file and sending it to the client using a redirect status code of the http response message".

In other words, the redirect file is merely a file which may comprise a location of the object, i.e. URL, or other information.

In Hu '322, the network request manager responds with the website address of content server [i.e. URL] and/or whatever information is necessary for the client to contact the content server directly when the redirection criteria are satisfied, e.g. col. 11 L16-35, col. 12 L35-52.

That is, the network request manager must retrieve the web site address [URL] of the content and/or "whatever information", i.e. the redirect file comprising the location of object, from a location in order to return the response message to the client.

[It should noted that Examiner did not rely on inherency, and introduced Fielding et al. for teaching the redirect status code of the http response message (See the detailed rejection)].

As such, Hu '322, logically, discloses retrieving the redirect file [i.e. information such as URL] and sending it to the client using the redirect status code of the http response message [redirection in http can ONLY be achieved via the usage of the redirection codes, See Fielding [10.3]].

(ii) In light of specification, e.g. pg. 17 lines 17-21, it appears that the redirect file could be interpreted as a code/subroutine/program that instructs the web server (programmatically) to return the redirect status code along with information.

Hu '322, at column 12 lines 43-52, teaches assuming that the redirection criteria have been satisfied, control passes to redirect module, i.e. invoking/retrieving the redirect module (the redirect module is a software component/file, e.g. col. 6 L10-22), which responds to client with whatever information is necessary for the client to contact the content server directly by instructing, programmatically, the network request manager operating as a web site to send the response message.

Note: In Hu '322 the redirect status codes are inherent because Hu '322 system is based on http protocol, e.g. col. 5 L20-33. However, inherency was evidenced by introducing Fielding et al., which discloses http protocol and its features, e.g. [10.3].

The combination of Hu '322 and Fielding discloses the process of retrieving/invoking the redirect file which instructs the web server to return the redirect status code along with the web site address as set forth above.

Furthermore, retrieving a redirect file to instruct the web server to send the redirect status code/message/response can be said to be inherent/obvious over Hu '322 and Fielding et al.

For example:

Hu '322 discloses programmatically evaluating criteria and sending the response message with web site address or whatever information is needed [Hu '322 utilizes the inherent feature of redirecting as is known in http protocol, e.g. Fielding et al., [10.3] because Hu '322 system is based on http protocol].

In order to implement this feature of redirection, there must be some type of invocation/retrieval of the file/code/subroutine/program [e.g. redirect module] that will instruct the web server, more specifically, server implementing http protocol, to return the redirect response message with the location of the requested object to the client, e.g. Fielding [10.3.2-10.3.4].

Without such programmatic instruction, the web server cannot and will not send the redirect response message.

k. Hu '322 fails to teach locating an object serving link that is utilized by the web server receiving the request to obtain the object from the intelligent storage system…(Brief, pg. 18-19: Last paragraph, pg. 19: last paragraph).

In response to argument [k], Examiner respectfully disagrees.

Hu '322, at column 6 lines 50-67, teaches parsing the client request for analyzing various type of information. The client request includes description of the action, description of data (e.g. an address, a tag recognized as identifying particular data). In the case of http requests, the location identifier is a URL.

In other words, the object serving link, i.e. URL, can be located and/or obtained from the client request by parsing the client request.

Furthermore, when the network request manager employs the proxy mode, the network request manager utilizes this URL obtained from the request to obtain the content/object from the content server and responding to the client with the results (col. 11 L4-60), which is a conventional approach known in the art.

Without locating and utilizing the object serving link, i.e. website address of the content or URL, the network request manager and/or web server would not be able to respond to the client's request.

l. However, appellant believes that Hu '518 teaches away...(Brief, pg. 21: 2nd-3rd paragraph, pg. 23: 2nd paragraph).

In response to argument [l], Examiner respectfully disagrees for the same reasons as set forth in response to argument [d] and [j-k].

m. In supporting…the motivations provided by the Examiner is merely conclusory in nature and are unsupported (Brief, pg. 21-22: Last paragraph).

In response to argument [m], Examiner disagrees, at least, for the same reasons as set forth in response to argument [e] and [j-k].

n. Also, the proposed modification cannot render the prior art unstatisfactory for its intended purpose...(Brief, pg. 22: Last paragraph).

In response to argument [n], Examiner disagrees, at least, for the same reasons as set forth in response to argument [g] and [j-k].

o. In this regard, it appears…Examiner is not evaluating the claim as a whole, but rather is attempting to piece claimed elements identified in the prior art in a impermissible hindsight manner (Brief, pg. 23: 2rd paragraph).

In response to argument [o], Examiner disagrees, at least, for the same reasons as set forth in response to argument [h] and [j-k].

Arguments pertaining to claim 50 (Brief, [2.] Pg. 24):

In response to this argument, Examiner disagrees for the same reasons as set forth above.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

(12) Attachments

Attachment A: Definition of a web site obtained from Wikipedia, the free encyclopedia.

(13) Conclusion

In summary, Examiner has clearly evaluated the claimed invention as a whole, and has clearly established a prima facie case of obviousness.

As it is seen in the brief, appellant is attempting to show nonobviousness by attacking references individually, whereas the rejections are clearly based on combinations of references.

MPEP 2145 (IV) clearly sets forth that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., Inc., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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